4 September 1970, volume 169 page 967

Aquatic Pathology

Principal Diseases of Marine Fish and Shellfish. CARL J. SINDERMANN. Academic Press, New York, 1970. xii, 372 pp., illus. \$17.50.

This book serves a dual purpose: as the first attempt to summarize in one volume the pertinent information on diseases of marine fish, mollusks, and crustaceans, it is a useful reference for the specialist in each of these fields; equally important, it should be read by everyone involved with marine fish and shellfish management as an introduction to the role of disease in wild and cultivated stocks. The fact that it is not exhaustively detailed may subject it to some criticism by the specialist, but the lack of detail is the very reason it will hold the attention of other readers. As the author points out in the introduction of the chapter on diseases of marine fishes, his approach is to present examples of significant diseases, concentrating on those that have received adequate attention and including a wide spectrum of pathogens and parasites. The coverage is adequate for both fish and shellfish.

Sindermann recognizes, in contrast to many authors, that such a selection process results in the omission or inadequate consideration of much literature. Further, there is a natural tendency to choose examples with which the author is best acquainted, frequently from his own or his colleagues' research. The reader, if he has published in the field, is inclined to fault the author for neglecting his (the reader's

contributions. A number of such omissions stung the reviewer as he read this volume, as they probably will other researchers. If one refrains from nitpicking and objectively considers the overall contribution, however, it is clear that the author has succeeded enviably in digesting a voluminous literature into a concise and readable summary. This is no surprise, for Sindermann has previously demonstrated an aptitude for the preparation of outstanding review papers.

The chapters on internal defense mechanisms in marine animals, the relation of human diseases to diseases of marine animals, the role of disease in marine populations, and future studies of diseases in the marine environment are particularly timely and are subjects usually ignored in books on fish disease. In these chapters Sindermann brings out important facets of the role of disease in fishery population dynamics that are not usually considered by those engaged in fishery management. The chapter on internal defense mechanisms is, again, a departure from previous texts, particularly with the inclusion of germane material not specifically related to infectious disease. Finally, attention is focused on the importance of disease studies, both diagnosis and treatment, to accompany the development of more intensive marine aquaculture.

ALBERT K. SPARKS

Bureau of Commercial Fisheries Biological Laboratory, Galveston, Texas

Contribution No. 310 from the Bureau of Commercial Fisheries Biological Laboratory, Galveston, Texas 77550.